

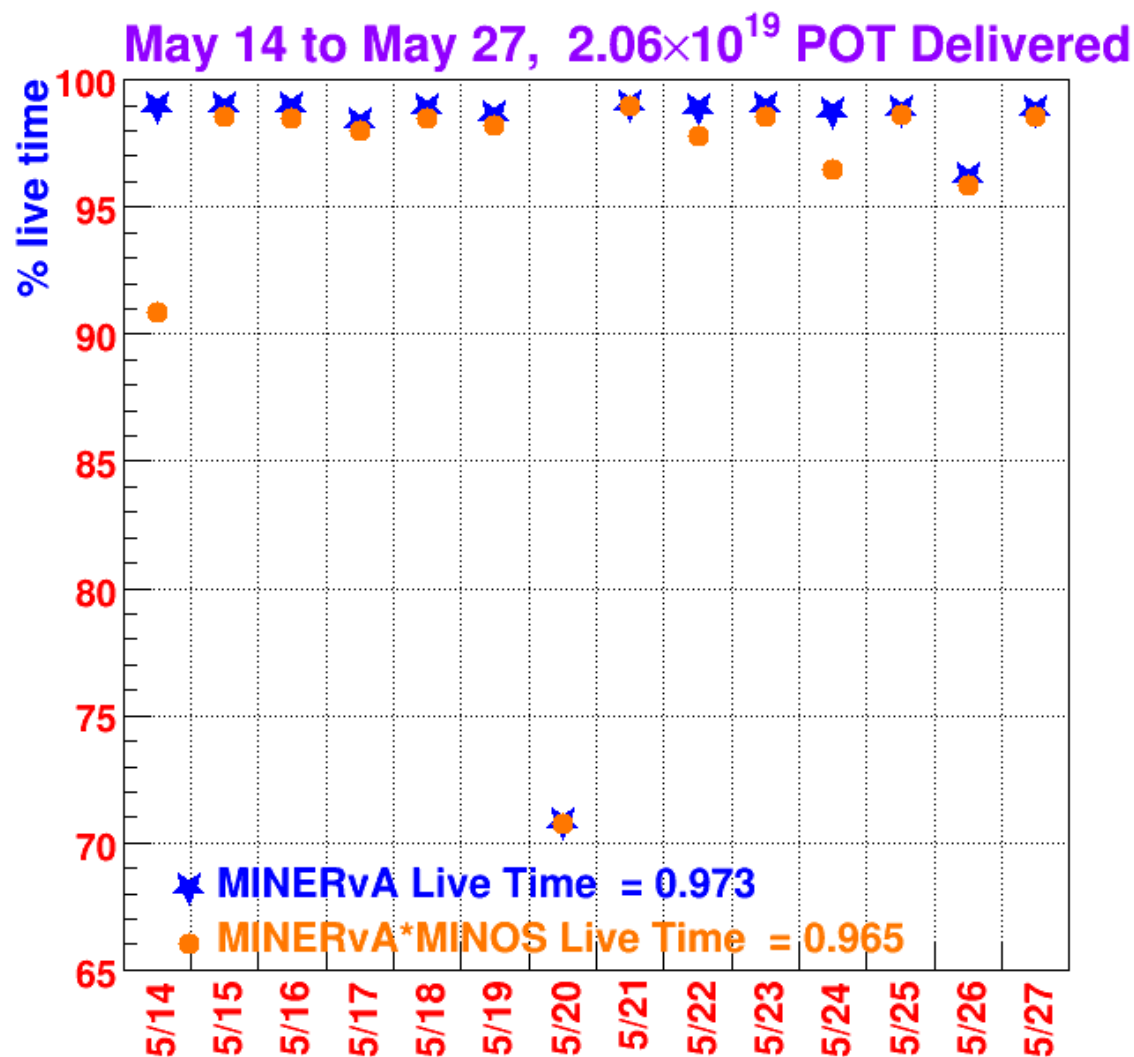
The MINERvA Operations Report

All Experimenters Meeting

Howard Budd, University of Rochester
June 1, 2015



v Data



- Live time, May 14-27, 2015
- 2.06×10^{19} POT
- MINERvA 97.3%
- MINERvA*MINOS 96.5%



v Data



- May 20 – 71% live
 - We had a VME readout error in one of the chains. Although we are not clear what actually happened, it appeared this particular error caused the communication between the DAQ computer and the VME crates to be lost. We were unable to talk to the VME crate, and we got a VME com error. The DAQ system came back when the DAQ computer was rebooted, probably because the reboot reloaded the VME driver.
 - We also had a problem because the detector expert was not able to log into the DAQ computer. We went through the permissions to insure all detector experts can log into the DAQ computer.



v Data



- As described in AEM talk on Mar 30 2015, on May 19 the same chain had a failure and caused a couple hour down time. In trying to recover the initial problem, we ended up with VME crate problems. After trying to get the system back the experts took a short break. When they came back everything worked. The problem was not the same as in this case we did not lose the VME readout. However, it was the same chain
 - A chain readout out 6 to 10 FEB. (2 for the veto counters)
 - CROC-E reads out 4 chains
 - There are 59 chains,
- We have decided to replace this CROC-E during a down time. We will be testing a spare CROC-E for replacement during a future downtime. If the problem reoccurs we will just replace the CROC-E.



v Data



- May 26 96.1%
 - We have occasionally been getting “Device Header” errors. The offline unpacking quits after it encounters a “Device Header” error. This happened twice on May 26 causing the reduced live time.
 - This header error occurs most often on same CROC-E we had with the problem described on the previous page although on a different chain.
 - As described in the same AEM talk on Mar 30 2015. We saw the same “Device Header” error on another chain in another CROC-E. We replaced that CROC-E and the “Device Header” error has not happened again on that CROC-E. Hence, we hope replacing this CROC-E will reduce the “Device Header” errors.



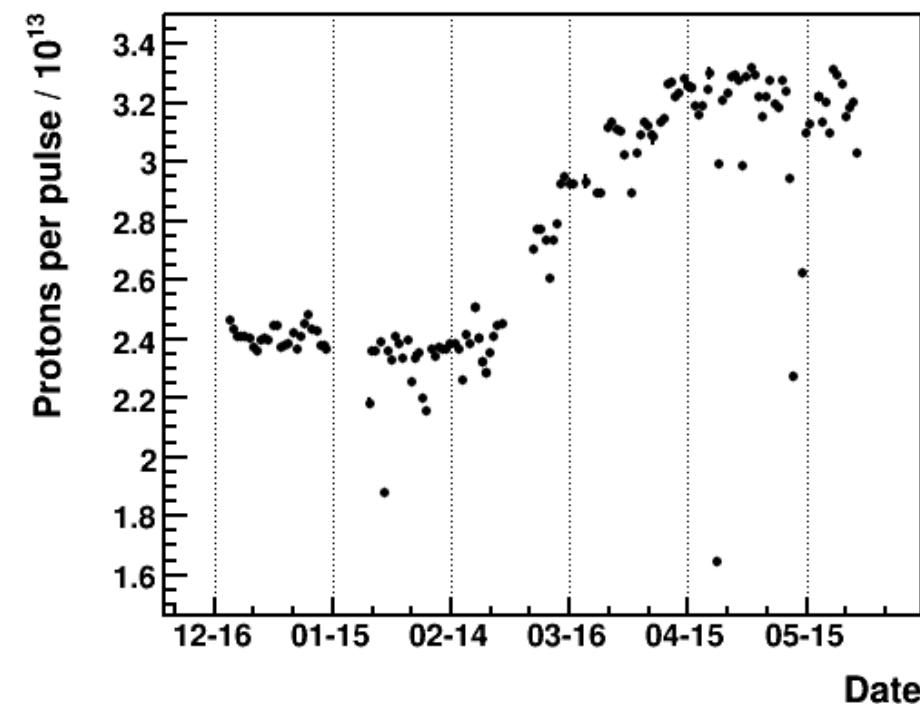
FEB Replaced During the Shutdown



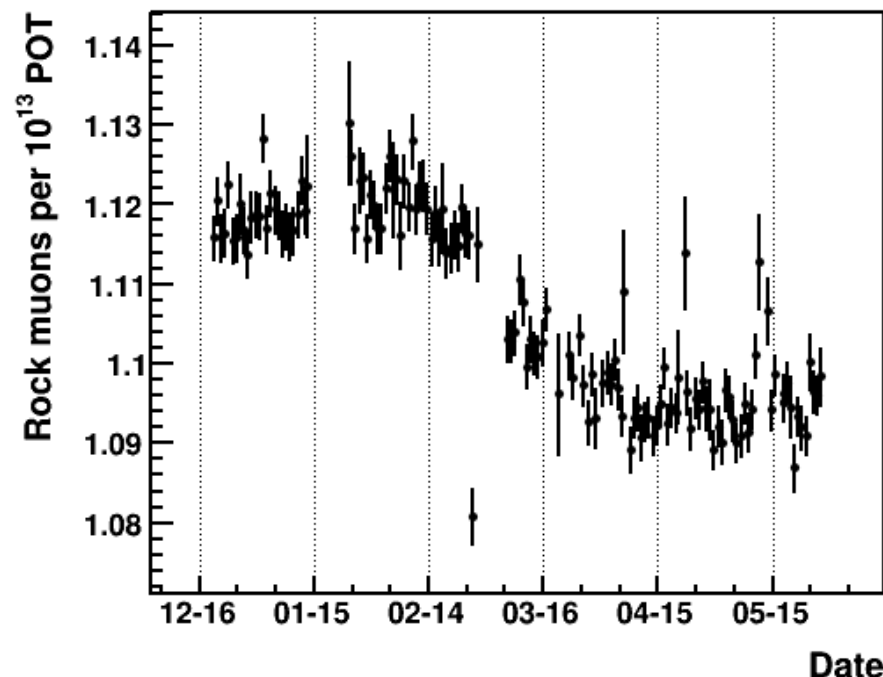
- During the shutdown we replaced and FEB to fix a high voltage (HV) varying problem.
 - Sometimes the HV drops suddenly, possibly from a spark in the PMT. The Crockcroft-Walton (CW) supply brings the voltage back to nominal, but may overshoot. The overshoot is not as nearly much as the drop. The return to normal takes ~ 10 gates. Usually only one PMT is doing this.
 - For this PMT, the voltage goes down ~ 10 volts and then the voltage overshoots by about the same as it dropped. This does not look like a HV discharge. In this case, replacing the FEB did not help.



Rock Muons/POT



POT/Pulse

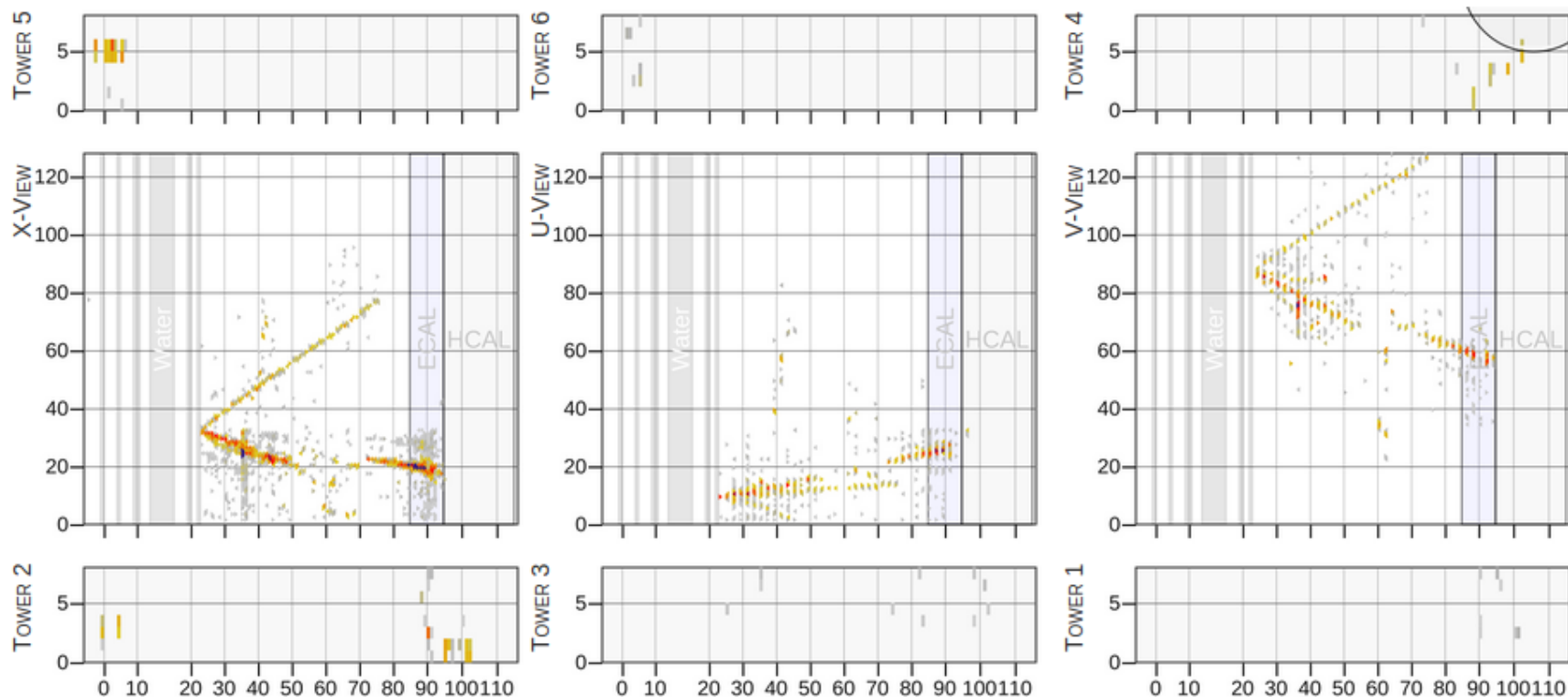


Rock Muons/POT

We suspect the drop in Rock Muons/POT may be due to reconstruction efficiency going down due to the higher instantaneous rate and should not necessarily be taken as any evidence of a rate dependence of real rock muons.



Event Display



X View

V View

U View

π^0 CC Tracker Event

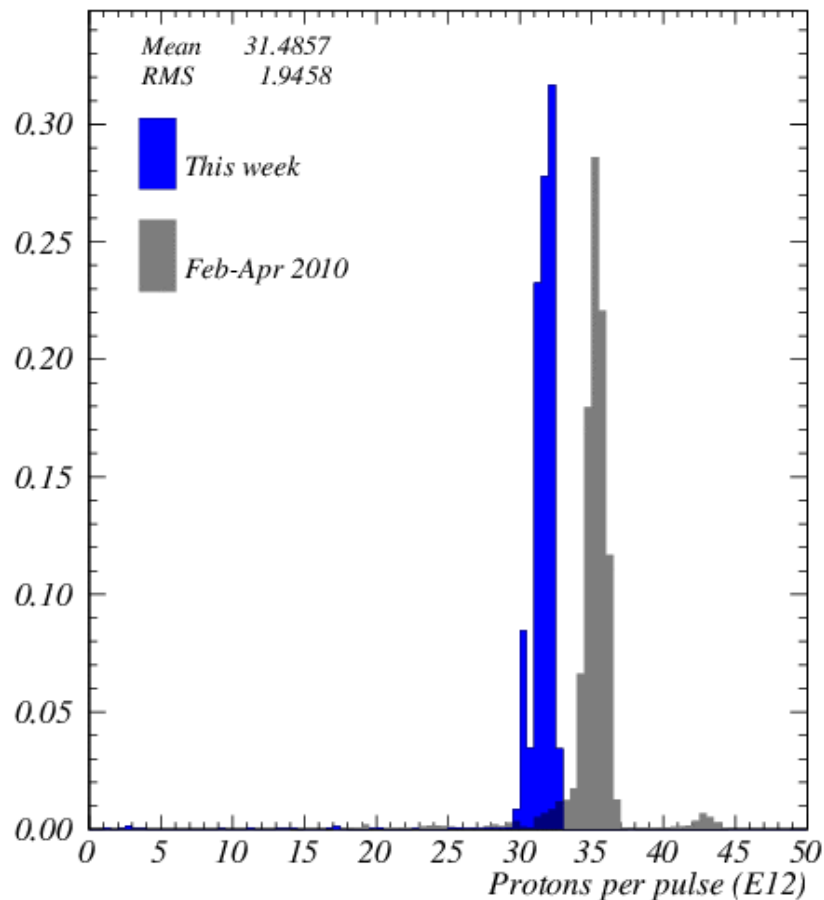


NuMI Beam Plots

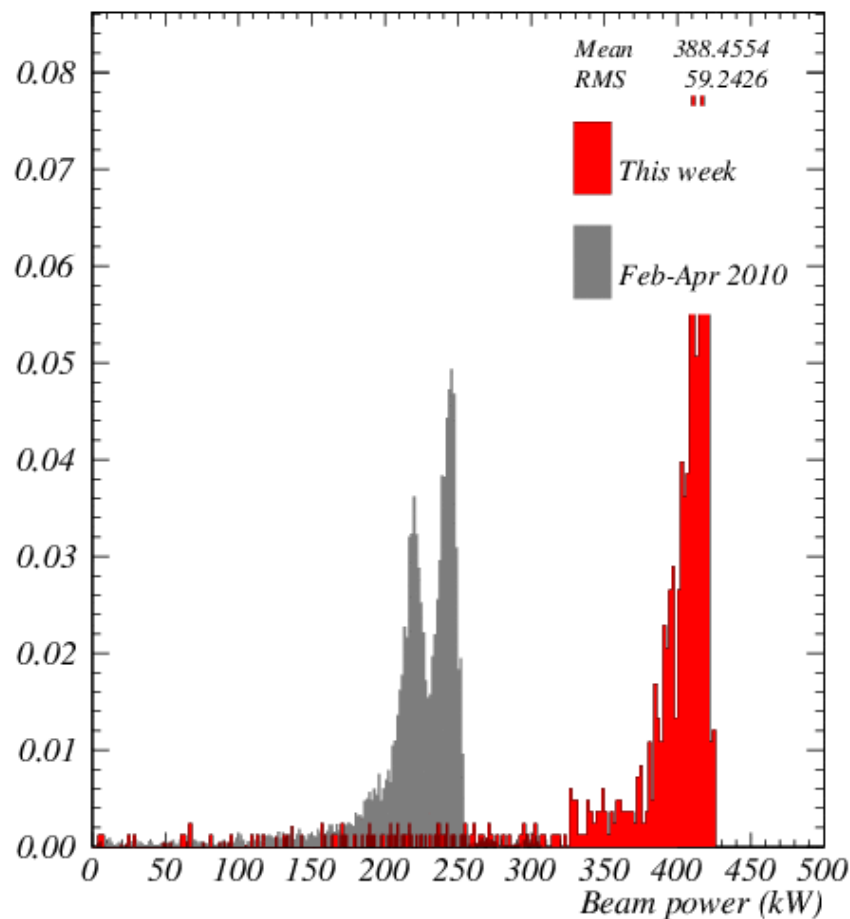
May 11-17, 2015



Week ending 00:00 Monday 01 June 2015



Week ending 00:00 Monday 01 June 2015

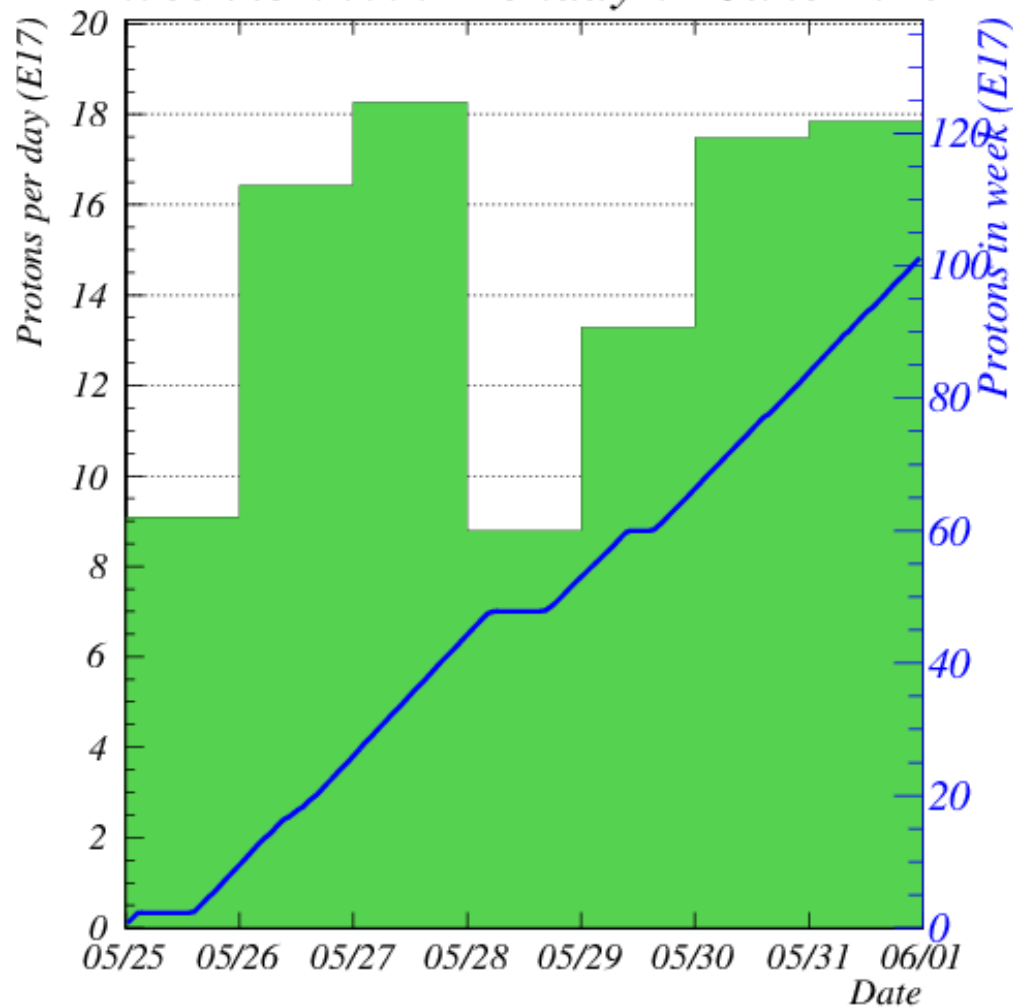




Protons for the Week



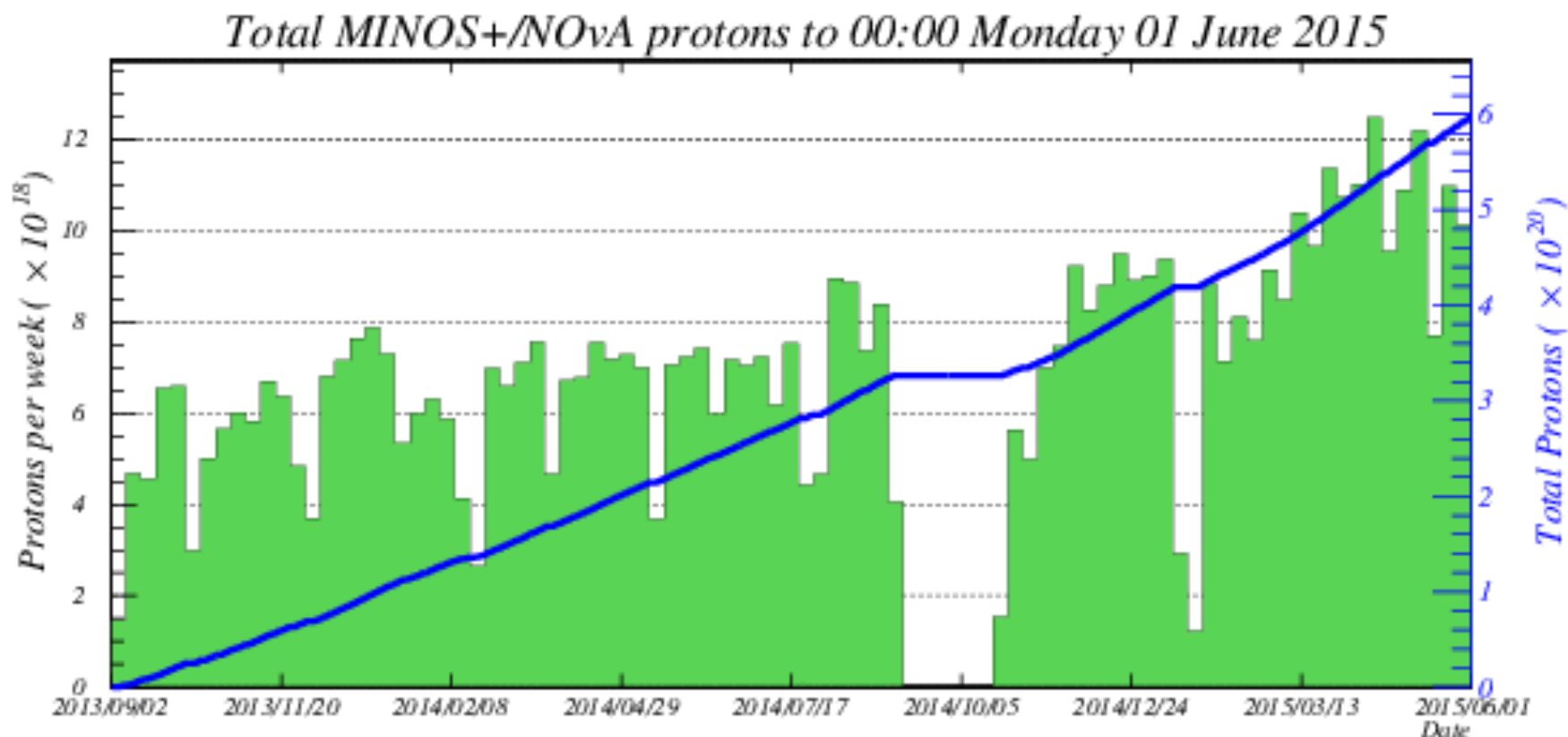
Week to 00:00 Monday 01 June 2015



1.01×10^{19} POT
May 25-31 2015



Protons for ME Run



59.63×10^{19} POT - Sep 6, 2013 at 15:00 – May 31, 2015